# TECHNICAL REVIEW DOCUMENT for OPERATING PERMIT 950PWE013

KN Wattenberg Transmission Company Ft. Lupton Compressor Station Weld County Source ID 1230057

> Prepared by Jacqueline Joyce August 12, 1997 Revised by Ashley L. Kendall March 6, 1998 Revised by Ashley L. Kendall May 11, 1998

# I. Purpose:

This document will establish the basis for decisions made regarding the Applicable Requirements, Emission Factors, Monitoring Plan and Compliance Status of Emission Units covered within the Operating Permit proposed for this site. It is designed for reference during review of the proposed permit by the EPA and during Public Comment. The conclusions made in this report are based on information provided in the original application submittal of December 30, 1994, supplemental technical submittals of January 11, February 27, March 31, June 19 and September 6, 1995, March 3, 1998 and telephone conversations with the source. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

On April 16, 1998 the Colorado Air Quality Control Commission directed the Division to implement new procedures regarding the use of short term emission and production/throughput limits on Construction permits. These procedures are being directly implemented in all operating permits that had not started their Public Comment period as of April 16, 1998. All short term emission and production/throughput limits that appeared in the construction permits associated with this facility that are not required by a specific State or Federal standard or by the above referenced Division procedures have been deleted and all annual emission and production/throughput limits converted to a rolling 12 month total. Note that, If applicable, appropriate modeling to demonstrate compliance with the National Ambient Air Quality Standards was conducted as part of the Construction Permit processing procedures. If required by this permit, portable monitoring results and/or EPA reference test method results will be multiplied by 8760 hours for comparison to annual emission limits unless there is a specific condition in the permit restricting hours of operation.

### II. Source Description:

This source is primarily classified as a natural gas compression facility defined under Standard Industrial Classification 4922. Gas is compressed to specification for transmission to sales pipelines using seven (7) internal combustion engines to power compressor units. Gas is also dehydrated in contact with triethylene glycol in a dehydration unit to reduce the moisture content of the compressed gas to acceptable levels. Also, an incinerator is used to dispose of nonhazardous combustibles contaminated with oil.

The facility is located near the community of Fort Lupton in Weld County in an area designated as attainment for all criteria pollutants. This source is considered to be a major source in an attainment area (Potential to Emit > 250 tons/yr) and is considered major for purposes of Prevention of Significant Deterioration (PSD) regulations (See discussion under 'Applicable Requirements' for the engines EU33, EU36 and EU37). Future modifications to this facility which are in excess of significance levels as defined in Colorado Regulation No. 3, Part A, Section I.B.58, would result in the application of PSD regulations. This facility is not subject to any Maximum Achievable Control Technology (MACT) standards at the time of permit issuance. However, a future MACT standard is being developed for operations at Oil and Gas facilities which may apply to this facility. Facility emissions are as follows:

<u>Pollutant</u>	Potential to Emit (tpy)	Actual (tpy)
PM	16.29	16.27
$PM_{10}$	16.29	16.27
NOx	463.15	463.14
VOC	285.50	285.35
CO	348.90	348.90
HAPs	69.49	69.30

Potential to Emit is based on construction permit limits for each unit, as reported in the Title V application. Actual emissions are based on a 1997 AIRS/AFS report.

This facility is within 100 kilometers of Rocky Mountain National Park, a Federal Class I designated area. The Federal Land Manager for the Park will therefore receive a copy of the Public Comment notice. There are no affected states (within a 50 mile radius) associated with this facility.

This facility is not subject to 112(r), the Accidental Release Requirements.

### III. Emission Sources:

The following sources are specifically regulated under terms and conditions of the Operating Permit for this site:

<u>Units EU31, EU32, and EU34</u> - Three (3) Waukesha, L-7401 Four Cycle, Rich Burn Internal Combustion Engines, Site Rated at 954 HP Each, Air to Fuel Ratio Controllers and Non-Selective Catalytic Converters. Serial No.'s 288358, 288792, and 250451.

#### Discussion:

1. Applicable Requirements - These engines were installed and began operation in 1975 as permit exempt engines. In 1997, two (2) engines were replaced, non-selective catalytic converters were put on all three engines (to stay under PSD significance levels), and stack heights were raised on all three engines. Therefore, these engines were issued initial approval construction permit 97WE0180 on September 17, 1997 with the following applicable requirements: visible emissions shall not exceed twenty percent (20%) opacity; subject to odor requirements of Regulation No. 2; consumption of natural gas shall not exceed 8,396 scf per hour and 73.54 Mmscf per year (for each engine); emissions of air pollutants from each engine shall not exceed 23.0 tons per year and 5.3 pounds per hour of Nitrogen Oxides (NOX), 9.2 tons per year and 2.1 pounds per hour of Volatile Organic Compounds (VOC), and 50.6 tons per year and 11.6 pounds per hour of Carbon Monoxide; performance tests for each engine will be conducted to measure the emission rates of Oxides of Nitrogen and Carbon Monoxide using EPA approved methods; and APEN reporting per Regulation No. 3, Part A.II.

The short term limits have been removed per policy change stated above.

The source commented to the Division in a letter dated March 3, 1998 that there was a discrepancy in the heating value used to calculate emissions and the heating value used by engine manufacturers to represent heat rate. The Division has agreed to use the Lower Heating Value (LHV) for emission calculations. As a consequence, the limit on throughput has been raised by 10% to compensate for the difference in HHV vs. LHV. The values listed above in the applicable requirements already represent that change. All the following engines have been treated the same way.

The due date of the first semi-annual monitoring report required by this operating permit will be more than 180 days after the initial approval construction permit was issued and/or the equipment commenced operation. Therefore, the Division considers that the Responsible Official certification submitted with that report will serve as the self-certification for construction permit 97WE0180 and the appropriate provisions of the construction permit have been directly incorporated into this operating permit.

**2. Emission Factors -** Emissions from these reciprocating engines are produced during the combustion process, and are dependent upon the air to fuel ratio adjustment and specific properties of the natural gas being burned. The pollutants of concern are Nitrogen Oxides (NOX), Carbon Monoxide (CO) and Volatile Organic

Compounds (VOC). Small quantities of Hazardous Air Pollutants (HAPs) are also emitted when combustion is incomplete. Approval of emission factors for these engines are necessary to the extent that accurate actual emissions are required to verify the need to submit Revised APENs to update the Division Emission Inventory. The following factors are acceptable for 4 Cycle, Internal Combustion engines with air/fuel ratio controllers and non-selective catalytic converters.

<u>Pollutant</u>	Emission Factor	<u>AP-42</u>
NOX	0.69 lbs/MMBTU	0.58 lbs/MMBTU
CO	1.52 lbs/MMBTU	2.4 lbs/MMBTU
VOC	0.275 lbs/MMBTU	0.047 lbs/MMBTU

All emission factors are above AP-42 except for CO.

**3. Monitoring Plan -** KN will calculate emissions for fee purposes based on fuel consumption. Specific monitoring guidance for Internal Combustion engines located in attainment areas has been developed by the Division as shown on the attached grid titled, "Compliance/Scenario Summary - Gas Fired IC Engines." The emission factors proposed are below AP-42 factors for CO. Therefore, the source will be required to conduct the emission calculations and fuel use on a rolling twelve month basis and catalyst parameters monthly. Portable monitoring for NOX and CO shall be conducted quarterly. The BTU Content of the natural gas used shall be calculated using the most recent gas analysis in the equation below:

Per construction permit 97WE0180, stack test's will be required to demonstrate compliance with the NOX and CO emission limits within 6 months of the Operating Permit issue date.

The Opacity standard of 20% will be demonstrated by a certification that the engines have used natural gas exclusively during the reporting period. The Division has determined, based on AP-42 emission factors and engineering judgement, that particulate emissions from these engines will be insignificant if the listed condition is met.

**4. Compliance Status -** Current APENs reporting criteria emissions are on file with the Division. KN certified within the application that natural gas has been used exclusively as the fuel for these units and that they believe the units to be in

compliance. An examination of the source file found no outstanding compliance issues. Therefore, these units are currently considered to be in compliance with all applicable requirements.

<u>Units EU33, EU36 and EU37- Three (3) Fairbanks Morse Model: MEP-12, Natural Fired Internal Combustion Engines, Site Rated at 2,166 HP Each. Serial No.'s 38D8780-30S1S12, 38D8780-28S1S12, and 38D8780-24S1S12.</u>

### Discussion:

1. Applicable Requirements - These engines were installed and began operation in 1978. In 1997, during a transfer of ownership modification the original permits were changed to incorporate more representative emission limits and compliance issues. Therefore, Colorado Initial Approval Construction Permits 11WE730-(1-3) (Mod.1) were issued, May 6, 1997 with the following applicable requirements: visible emissions shall not exceed twenty percent (20%) opacity; consumption of natural gas for each engine shall not exceed 20,317 scf per hour and 179.0 MMscf per year; emissions of air pollutants for each engine shall not exceed 4.22 tons per year and 1.0 pounds per hour of particulate matter (PM) and particulate matter under 10 microns (PM<sub>10</sub>), 104.5 tons per year and 23.9 pounds per hour of Nitrogen Oxides (NOX), 20.9 tons per year and 4.8 pounds per hour of Volatile Organic Compounds (VOC), and 50.2 tons per year and 11.5 pounds per hour of Carbon Monoxide (CO); performance tests for each engine will be conducted to measure the emission rates for Oxides of Nitrogen, Carbon Monoxide and Volatile Organic Compounds using EPA approved methods; and APEN reporting per Colorado Regulation No. 3, Part A.II.

The short term limits have been removed per policy change stated above.

An EPA PSD permit was also issued in 1980 for these engines with the following applicable requirement: Nitrogen Oxides (NOX) emissions shall not exceed 55 pounds per hour from any one engine authorized by this permit.

The due date of the first semi-annual monitoring report required by this operating permit will be more than 180 days after the initial approval construction permits were issued and/or the equipment commenced operation. Therefore, the Division considers that the Responsible Official certification submitted with that report will serve as the self-certification for construction permits 11WE730-(1-3) and the appropriate provisions of the construction permits have been directly incorporated into this operating permit.

2. Emission Factors - Emissions from these reciprocating engines are produced during the combustion process, and are dependent upon the air to fuel ratio adjustment and specific properties of the natural gas being burned. The pollutants of concern are Nitrogen Oxides (NOX), Carbon Monoxide (CO) and Volatile Organic Compounds (VOC). Small quantities of Hazardous Air Pollutants (HAPs) are also

emitted when combustion is incomplete. Approval of emission factors for this engine are necessary to the extent that accurate actual emissions are required to verify the need to submit Revised APENs to update the Division Emission Inventory. The following factors are acceptable for 2 Cycle, Lean Burn Internal Combustion engines.

<u>Pollutant</u>	Emission Factor	<u>AP-42</u>
NOX	1.36 lbs/MMBtu	2.7 lbs/MMBtu
CO	0.65 lbs/MMBtu	0.38 lbs/MMBtu
VOC	0.27 lbs/MMBtu	0.11 lbs/MMBtu

All emission factors are above AP-42 except for NOX.

**3. Monitoring Plan -** KN will calculate emissions for fee purposes based on fuel consumption. The emission factors proposed are below AP-42 factors for NOX. Therefore, according to the monitoring grid attached, the source will be required to conduct the emission calculations and fuel use on a rolling twelve month basis. Portable monitoring for NOX and CO shall be conducted quarterly and a one time stack test must be performed to ensure accurate emission factors are being used. The BTU Content of the natural gas used shall be calculated as done above.

The Opacity standard of 20% will be demonstrated by a certification that the engines have used natural gas exclusively during the reporting period.

**4. Compliance Status -** Current APENs reporting criteria emissions are on file with the Division. KN certified within the application that natural gas has been used exclusively as the fuel for these units and that they believe the units to be in compliance. An examination of the source file found no outstanding compliance issues. Therefore, these units are currently considered to be in compliance with all applicable requirements.

<u>Unit EU35</u> - One (1) Fairbanks Morse Model: MEP-10, Natural Gas Fired Internal Combustion Engine, Site Rated at 1,859 HP. Serial No. 38D8750-45S1S10.

### Discussion:

**1. Applicable Requirements -** This engine was installed and began operation in 1976. Colorado Construction Permit 11WE132 was issued with the following applicable requirements: visible emissions shall not exceed twenty percent (20%) opacity; consumption of natural gas shall not exceed 16,500 scf per hour and 144.5 Mmscf per year; emissions of air pollutants shall not exceed 3.61 tons per year and 0.9 pounds per hour of Particulate Matter (PM) and Particulate Matter under 10 microns ( $PM_{10}$ ), 80.5 tons per year and 18.4 pounds per hour of Nitrogen Oxides

(NOX), 17.9 tons per year and 4.1 pounds per hour of Volatile Organic Compounds (VOC), and 46.5 tons per year and 10.7 pounds per hour of Carbon Monoxide (CO); a performance test will be conducted to measure the emission rates for Oxides of Nitrogen and Carbon Monoxide using EPA approved methods; and APEN reporting per Colorado Regulation No. 3, Part A.II.

The short term limits have been removed per policy change stated above.

The due date of the first semi-annual monitoring report required by this operating permit will be more than 180 days after the initial approval construction permit was issued and/or the equipment commenced operation. Therefore, the Division considers that the Responsible Official certification submitted with that report will serve as the self-certification for construction permit 11WE132 and the appropriate provisions of the construction permit have been directly incorporated into this operating permit.

2. Emission Factors - Emissions from these reciprocating engines are produced during the combustion process, and are dependent upon the air to fuel ratio adjustment and specific properties of the natural gas being burned. The pollutants of concern are Nitrogen Oxides (NOX), Carbon Monoxide (CO) and Volatile Organic Compounds (VOC). Small quantities of Hazardous Air Pollutants (HAPs) are also emitted when combustion is incomplete. Approval of emission factors for this engine are necessary to the extent that accurate actual emissions are required to verify the need to submit Revised APENs to update the Division Emission Inventory. The following factors are acceptable for 2 Cycle, Lean Burn Internal Combustion engines.

<u>Pollutant</u>	<b>Emission Factor</b>	<u>AP-42</u>	
NOX	1.23 lbs/MMBtu	2.7 lbs/MMBtu	
CO	0.71 lbs/MMBtu	0.38 lbs/MMBtu	
VOC	0.27 lbs/MMBtu	0.11 lbs/MMBtu	

All emission factors are above AP-42 except for NOX.

**3. Monitoring Plan-** KN will calculate emissions for fee purposes based on fuel consumption. The emission factors proposed are below AP-42 factors for NOX. Therefore, according to the monitoring grid attached, the source will be required to conduct the emission calculations and fuel use on a rolling twelve month basis and portable monitoring for NOX and CO shall be conducted quarterly. The BTU Content of the natural gas used shall be calculated as done above. Per construction permit 11WE132, a stack test will be required to demonstrate compliance with the NOX and CO emission limits within 6 months of the Operating Permit issue date.

The Opacity standard of 20% will be demonstrated by a certification that the engines have used natural gas exclusively during the reporting period.

**4. Compliance Status -** A current APEN reporting criteria emissions is on file with the Division. KN certified within the application that natural gas has been used exclusively as the fuel for this unit and that they believe the unit to be in compliance. An examination of the source file found no outstanding compliance issues. Therefore, this unit is currently considered to be in compliance with all applicable requirements.

# <u>Unit EU04</u> - One (1) Smith Model: Not Available, Natural Gas Dehydration System, Rated at 30 MMSCFD.

### Discussion:

1. Applicable Requirements - This unit was installed and began operation in 1980 and has Colorado Initial Approval Construction permit 97WE760-4 with the following applicable requirements: visible emissions shall not exceed twenty percent (20%) opacity; the natural gas processing rate shall not exceed 25 MMscf per day and 9,125 MMscf per year; records of the actual natural gas process rate and actual amount of make-up triethylene glycol shall be maintained at the site and made available to the Division for inspection; circulation rate of triethylene glycol shall not exceed 240.0 gallons per hour; emissions of air pollutants shall not exceed 146.5 tons per year and 33.5 pounds per hour of Volatile Organic Compounds (VOCs); a performance test will be conducted to measure the emission rates for Volatile Organic Compounds using EPA approved methods; and APEN reporting per Colorado Regulation No. 3, Part A.II.

The short term limits have been removed per policy change stated above.

A future Maximum Achievable Control Technology (MACT) standard is being developed for operations at Oil and Gas facilities which may apply to emissions from glycol dehydration units.

The due date of the first semi-annual monitoring report required by this operating permit will be more than 180 days after the initial approval construction permit was issued and/or the equipment commenced operation. Therefore, the Division considers that the Responsible Official certification submitted with that report will serve as the self-certification for construction permit 94WE760-4 and the appropriate provisions of the construction permit have been directly incorporated into this operating permit.

2. Emission Factors - Triethylene glycol is contacted with the natural gas stream to remove moisture. This glycol-water mixture is heated in the still vent portion of the unit which drives off the water and some entrained VOCs. Emissions from this process were predicted using the Gas Research Institute's GLYCalc Model. Emission factors of VOC and various HAPs are dependent upon the variables input into this Model. These variables include glycol recirculation rate, cubic feet of gas

processed, inlet temperature and pressure of the processed wet gas, and percentage breakdown by volume of constituents in the natural gas. Combustion emissions from the heater are exhausted through a separate stack. The boiler at this site is rated at 0.6 MMBtu/hr and falls under the insignificant activity category of Colorado Reg. 3, Part C, Section II.E.3.k. Therefore, these combustion emissions do not need to be regulated in the Operating Permit.

- 3. Monitoring Plan The Gas Research Institute's manual for their GlyCalc Version 3.0 Model defines the wet gas (inlet) temperature, glycol recirculation rate, and gas BTEX content as the three critical inputs to the Model for triethylene glycol units. Changes to the gas flow rate and inlet pressure do not radically affect emissions from glycol dehydrators. Therefore, parametric monitoring of the inlet temperature, recirculation rate and BTEX content will be required as part of the monitoring plan for this site as detailed in Condition 4.1 of Section II of the Operating Permit. Inlet pressure will be held constant for modeling purposes. Modeling will only be required when the measured values for inlet temperature, recirculation rate and BTEX content do not meet the comparison criteria as related to the stipulated values in Condition 4.1 of the permit. The specific parameter values listed in the permit were supplied by KN and define a worst-case scenario for dehydrator emissions. Per construction permit 94WE760-4, a stack test will be required to demonstrate compliance with the VOC emission limits within 6 months of the Operating Permit issue date.
- **4. Compliance Status -** A current APEN reporting criteria emissions is on file with the Division. KN certified within the application that natural gas has been used exclusively as the fuel for this unit and that they believe the unit to be in compliance. An examination of the source file found no outstanding compliance issues. Therefore, this unit is currently considered to be in compliance with all applicable requirements.

# <u>Unit 1001</u> - One (1) Elastec Inc. Smart Ash Energy Recovery Incinerator Model: 100.

### Discussion:

1. Applicable Requirements - This unit was installed and began operation in 1997 and has Colorado Initial Approval Construction Permit 97WE0406 with the following applicable requirements: operation of equipment shall comply with Colorado Air Quality Control Regulation No. 6, Part B.VII, New Source Performance Standards (NSPS) for incinerators which includes visible emission limits, particulate emission limits, and recordkeeping requirements; charging rate shall not exceed 80 pounds per hour and 30 tons per year; absorbent materials that contain volatile liquids shall not be burned in this unit and material that is burned must have a flash point higher than 100 degrees Fahrenheit; combustion chamber must not be overloaded; liquid fuel shall not be used as start-up fuel, limits on emissions of air pollutants; operation

of the incinerator in accordance with manufacturer's operating instructions and by trained personnel who are competent and knowledgeable of the operating instructions and maintenance procedures; there shall be no radioactive and hazardous waste materials of any type burned in this unit; and APEN reporting per Colorado Regulation No. 3, Part A.II.

The due date of the first semi-annual monitoring report required by this operating permit will be more than 180 days after the initial approval construction permit was issued and/or the equipment commenced operation. Therefore, the Division considers that the Responsible Official certification submitted with that report will serve as the self-certification for construction permit 97WE0406 and the appropriate provisions of the construction permit have been directly incorporated into this operating permit.

2. Emission Factors - Although emissions are low for this unit, there are no emission de minimis levels for either APEN or permitting requirements (Colorado Regulation No. 3, Part A.II.D.2 and Regulation No. 3, Part B.III.D.7) for incinerators. As a result annual emission calculations will be required. The pollutants of concern are Particulate Matter (PM and PM10), Nitrogen Oxides (NOX), and Sulfur Dioxide (SO2) and are dependent on the material combusted. Approval of emission factors is necessary to the extent that accurate actual emissions are required to verify the need to submit revised APENs to update the Division's Emission Inventory and for payment of fees. The emission factors used in the construction permit are below compared to AP-42 values found in Tables 2.1-2 and 2.1-7.

<u>Pollutant</u>	Emission Factor lb/ton	AP-42 lb/ton
PM	1.4	25.1
PM10	1.04	NA
SO2	1.5	3.46
NO2	10.0	2.47

- **3. Monitoring Plan -** KN will calculate emissions for fee purposes based on the amount of waste burned. Emissions shall be calculated annually to ensure compliance with the annual limitations which requires keeping annual records of waste burned, maintain records of personnel trained to operate the incinerator and perform visual emission observations. A record of daily burning rates, hours of operation, any particulate measurements taken, type of waste, weight of charge and any notes regarding incineration operation shall be summarized monthly. Conditions 5.1 through 5.8 identify how the source will be required to determine compliance with the requirements.
- **4. Compliance Status -** A current APEN reporting criteria emissions is on file with the Division. KN certified within the application that natural gas has been used exclusively as the fuel for this unit and that they believe the unit to be in compliance. An examination of the source file found no outstanding compliance issues.

Therefore, this unit is currently considered to be in compliance with all applicable requirements.

## <u>Unit F001</u> - Fugitive Emissions of VOCs from Equipment Leaks.

### Discussion:

1. Applicable Requirements - The Division has made the determination that Fugitive VOC emissions from equipment leaks at gas compression or processing facilities must be calculated and evaluated for the appropriate permitting requirements. KN submitted calculations documenting VOC emissions from this plant. Total facility emissions of VOC exceed the 5 ton per year permitting threshold in Colorado Regulation 3, Part B, Section III.D.c. Therefore, Colorado Initial Approval Construction permit 96WE641 was issued on January 31, 1997 limiting VOC fugitive emissions to 30.8 tons per year and 7.03 lbs per hour.

The due date of the first semi-annual monitoring report required by this operating permit will be more than 180 days after the initial approval construction permit was issued and/or the equipment commenced operation. Therefore, the Division considers that the Responsible Official certification submitted with that report will serve as the self-certification for construction permit 96WE641 and the appropriate provisions of the construction permit have been directly incorporated into this operating permit.

- 2. Emission Factors KN has calculated emissions from equipment leaks based on emission factors from EPA's Protocol for Emission Leak Estimates (Table 2-6 (EPA 453/R-95-017)). Factors are multiplied by the number of components of each type (e.g. Compressor Seals) and the VOC weight percentage in the organic portion of the gas stream as determined in the most recent analysis. EPA factors are given in terms of Total Organic Compounds.
- **3. Monitoring Plan -** As a means of recordkeeping, an initial physical hard-count of facility components will be conducted within 90 days of permit issuance to verify existing hardware inventory. Records shall be kept of all component additions and deletions, and a running tally maintained. A physical hard-count of facility components shall be conducted every five years following the initial count required under this condition.
- **4. Compliance Status -** A current APEN reporting criteria emissions is on file with the Division. KN certified within the application that natural gas has been used exclusively as the fuel for this unit and that they believe the unit to be in compliance. An examination of the source file found no outstanding compliance issues. Therefore, this unit is currently considered to be in compliance with all applicable requirements.

### IV. Insignificant Activities

Methanol storage tank, 8800 gal
Two (2) glycol storage tanks, 5200 & 5876 gal
Three (3) antifreeze storage tanks, 2x1000 & 517 gal
Mineral spirits storage tank, 517 gal
Five (5) condensate storage tanks, all 8300 gal
Used engine oil storage, 1030 gal
New engine oil storage, 9450 gal
Condensate storage groundwater sump
Condensate overflow and vent tank
Dehydrator Unit, Natural gas-fired heater, 600,000 Btu/hr

### V. Alternative Operating Scenarios

### **Temporary Engine Replacement-**

KN has requested that temporary replacement of engines during times of engine overhaul be considered an Alternative Operating Scenario under the Operating Permit if they can determine through flue gas analyzer testing that emissions will be equal to or less than those from the engine replaced. The Division has concluded that temporary replacement will be defined as less than a 3 month period. KN must be willing to accept a determination of non-compliance should flue gas analyzer testing indicate that the emission factors for the engine in question exceed those defined in the Operating Permit. Non-compliance will be considered to have occurred from the day the engine was replaced.

### VI. Permit Shield

Regulation No. 6, Part B, Subpart KKK (40 CFR 60, Subpart KKK) - There is no existing natural gas liquid extraction unit located at the Ft. Lupton facility. Any liquids recovered on-site are done so through gravimetric separation processes typical of inlet gas separation implemented at most compressor stations.